

CORRESPONDENCE

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To enhance the timeliness of publication of Letters to the Editor, the Editorial Board approves the changes whereby pre-publication proofs of Letters accepted for publication will no longer be available. Additional guidelines regarding Letters to the Editor can be found in the Guide for Authors.

Improper Diagnostic Test May Account for High Incidence of Malignant Hyperthermia Associated with Masseter Spasm

To the Editor:—We were surprised when we read the paper entitled “Masseter spasm with anesthesia: incidence and implications,” by Schwartz *et al.*,¹ to realize that all 15 of their masseter spasm patients proved to be susceptible to malignant hyperpyrexia (MHS). In our experience of 100 patients presenting with muscle spasm following succinylcholine (almost invariably involving the masseters), 64 were found to be MHS and 36 to be normal (MHN) on *in vitro* testing. A similar proportion of MHS to MHN was reported by Rosenberg and co-workers.*

This leads us to question how Schwartz and associates diagnosed the MH status of their patients. The last sentence in the Methods section indicates that the MH phenotypes were determined by a method described by Allen and co-workers in 1980.† Yet to our knowledge this method has not been evaluated independently against the now accepted muscle contracture tests performed on living muscle from known fulminant MH probands. The only description we have is in the form of an abstract describing a pilot study.‡ Even in the abstract by Allen *et al.*,† from which Schwartz *et al.*¹ derived their normal range, the SR Ca²⁺ uptake range of the MHS muscle overlaps with that of their non-MHS controls. If inappropriate muscle spasm is taken to indicate clinical MH, they could be subjecting themselves to a circular argument.

* Rosenberg H, Reed S, Heiman T: Masseter spasm, rhabdomyolysis and malignant hyperpyrexia (abstract). *ANESTHESIOLOGY* 53:S248, 1980

† Allen PD, Ryan JF, Sreter FA, Mabuchi K: Rigid *vs.* nonrigid MH, studies of Ca²⁺ uptake and actomyosin ATPase (abstract). *ANESTHESIOLOGY* 53:S251, 1980

‡ Ryan J, Sreter F, Mabuchi K: Histochemical assays for the prediction of MH. Abstracts of the American Society of Anesthesiologists, 1977, p 331

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Our criticisms are strengthened when the incidence implications of their findings are considered. In their series of 15 patients, masseteric spasm correlated perfectly with MH. Thus, their incidence of MH is 1:800—the highest incidence ever quoted by a factor of about 10. Yet, in none of these cases was the outcome fatal—the lowest incidence ever quoted. As their study was retrospective, had MH occurred so commonly, serious complications would surely have been encountered.

Over the last 2 yr, there has been an increasing conformity in the laboratory criteria for the interpretation of the halothane and the caffeine contracture tests, especially among European centers (European Malignant Hyperpyrexia Group).² With standardization of this type, true comparisons can be made between centers. It is unfortunate that the Boston group remains fiercely independent of this welcome trend.

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2. European Malignant Hyperpyrexia Group: A protocol for the investigation of malignant hyperpyrexia (MH) susceptibility. *Br J Anaesth* 54:1267–1269, 1984

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Masseter Spasm and Malignant Hyperthermia Are Not the Same Thing

To the Editor:—In “Masseter Spasm with Anesthesia: Incidence and Complications,” Schwartz *et al.* retrospectively attempt to correlate the occurrence of masseter spasm with anesthetic agents, signs, symptoms, and laboratory evaluations known to be associated with malignant hyperthermia.¹ We take issue with their conclusions about

masseter spasm and its relation to malignant hyperthermia.

The retrospective nature of this study is a serious flaw. Much information is lacking: only two patients were monitored with transcutaneous nerve stimulation, eliminating the certainty of neuromuscular blockade in 13 patients.